22. (amended) The process according to claim 3 wherein at least one of said one or more immunogenic polypeptides is of a sequence independently selected from the group consisting of SEQ ID NOs: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

23. (amended) [The process according to claim 13]

A process for increasing the concentration of HDL cholesterol in the blood of a mammal whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) immunizing said mammal with an inoculum containing a vehicle in which is dissolved or dispersed a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a CETP immunogen linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in said mammal, said CETP immunogen comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides comprising a CETP amino acid residue sequence of about 10 to about 30 residues, wherein said one or more immunogenic polypeptides are of a sequence selected from the group consisting of SEQ ID NOs: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50,wherein said antigenic carrier is fused to both of the amino-terminus of at least one of said one or more immunogenic polypeptides and the carboxy-terminus of at least one of said one or more immunogenic polypeptides, thereby forming an encoded fusion protein, wherein said encoded fusion protein is fused to an amino-terminal flanking sequence and a carboxy-terminal flanking sequence, wherein

(1) said amino-terminal flanking sequence consists essentially of about 10 to about 20 amino acid residues having an amino acid residue sequence of the hepatitis B core protein (HBcAg) from about position 1 to about position 35, and said carboxy-terminal sequence consists essentially of about 120 to about 160 amino acid residues having an amino acid residue sequence of HBcAg from about position 10 about position 183, or

(2) said amino-terminal flanking sequence consists essentially of about 70 to about 90 residues having the amino acid residue sequence of HBcAg from about position 1 to about position 90, and said carboxy-terminal flanking sequence consists essentially of about 65 to about 85 amino acid residues having the amino acid residue sequence of HBcAg from about position 80 to about position 183; and

(b) maintaining said immunized mammal for a time period sufficient for said CETP immunogen to be expressed and for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby increasing the HDL concentration.

24. (amended) A process for increasing the concentration of HDL cholesterol in the blood of a mammal whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) immunizing said mammal with an inoculum containing a vehicle in which is dissolved or dispersed a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a human CETP immunogen, said encoded human CETP immunogenic polypeptide comprising a sequence selected from

the group consisting of SEQ ID NOs: 8-13 and 29 linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in said mammal, said CETP immunogen comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides comprising a CETP amino acid residue sequence of about 10 to about 30 residues; and

(b) maintaining said immunized mammal for a time period sufficient for said CETP immunogen to be expressed and for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby increasing the HDL concentration.

25. (amended) The process according to claim 7 wherein said encoded rabbit CETP immunogenic polypeptide comprises a sequence selected from the group consisting of SEQ ID NOs: 2-7 and 50.

26. (amended) The process according to claim 3 wherein said recombinant DNA molecule encodes monkey CETP as at least one of said one or more immunogenic polypeptides.

27. (amended) The process according to claim 26 wherein said at least one encoded monkey CETP immunogenic polypeptide comprises a sequence selected from the group consisting of SEQ ID NOs: 32-36 and 37.

28. (amended) The inoculum according to claim 35 wherein at least one of said one or more immunogenic polypeptides is of a sequence selected from the group consisting of SEQ ID NOs: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

31. (twice amended) The recombinant DNA according to claim 30 wherein at least one of said one or more immunogenic polypeptides [are] is of a sequence independently selected from the group consisting of SEQ ID NOs: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 29, 32, 33, 34, 35, 36, 37 and 50.

New Claims

Please add the following claims 40-47:

40. A process for increasing the concentration of HDL cholesterol in the blood of a human whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) immunizing said mammal with an inoculum containing a vehicle in which is dissolved or dispersed a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a CETP immunogen, said encoded CETP immunogenic polypeptide linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in said mammal, said CETP immunogen comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides comprising a CETP amino acid residue sequence of about 10 to about 30 residues, wherein the number of amino acid residues present in said encoded immunogenic polypeptide is about equal in number to the number of amino acid residues absent from said HBcAg amino acid residue sequence between the carboxy-terminal residue position of said amino terminal flanking sequence and the amino-terminal residue of said carboxy-terminal flanking sequence; and

(b) maintaining said immunized mammal for a time period

sufficient for said CETP immunogen to be expressed and for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby increasing the HDL concentration.

41. A process for increasing the concentration of HDL cholesterol in the blood of a human whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) immunizing said human with an inoculum containing a vehicle in which is dissolved or dispersed a recombinant DNA molecule comprising a DNA sequence that contains (i) a sequence encoding a CETP immunogen, said encoded human CETP immunogenic polypeptide comprising a sequence selected from the group consisting of SEQ ID NOs: 8-13 and 29 linked to (ii) a promoter sequence that controls the expression of said CETP immunogen DNA sequence in said mammal, said CETP immunogen comprising an antigenic carrier of hepatitis B core protein to which is covalently bonded one or more immunogenic polypeptides comprising a CETP amino acid residue sequence of about 10 to about 30 residues; and

(b) maintaining said immunized mammal for a time period sufficient for said CETP immunogen to be expressed and for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby increasing the HDL concentration.

42. A process for increasing the concentration of HDL cholesterol in the blood of a mammal whose blood contains cholesteryl ester transfer protein (CETP) that comprises the steps of:

(a) causing to be present in said mammal a CETP immunogen in an amount effective to raise antibodies in said mammal to CETP endogenous to said mammal comprising an antigenic carrier polypeptide covalently bonded to at least one immunogenic polypeptide of about 10 to about 30 residues comprising a CETP amino acid residue sequence, said CETP amino acid residue sequence corresponding to a sequence of CETP endogenous to said mammal; and

(b) maintaining said mammal for a time period sufficient for the production of antibodies that bind to CETP and lessen the transfer of cholesteryl esters from HDL, thereby increasing the HDL concentration.

43. The process of claim 42 wherein said CETP immunogen is expressed in said mammal through an appropriate recombinant expression vector.

44. The process of claim 42 wherein said antigenic carrier is of Hepatitis B core protein.

45. The process of claim 43 wherein said recombinant expression vector is injected intramuscularly in said mammal.

46. The process of claim 42 wherein said mammal is a human, and said CETP amino acid residue sequence corresponds to a human CETP residue sequence.

47. The process of claim 46 wherein said human CETP residue sequence is selected from the group consisting of SEQ ID NOs: 8-13 and 29.